L Number	Hits	Search Text	DB	Time stamp
6	47	furanyl with (quinazolin or quinazolyl)	· USPAT;	2003/04/29 19:32
			US-PGPUB	
7	33	thiazol with (quinazolin or quinazolyl)	USPAT;	2003/04/29 19:33
			US-PGPUB	

ZAST 10/071,358

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COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION

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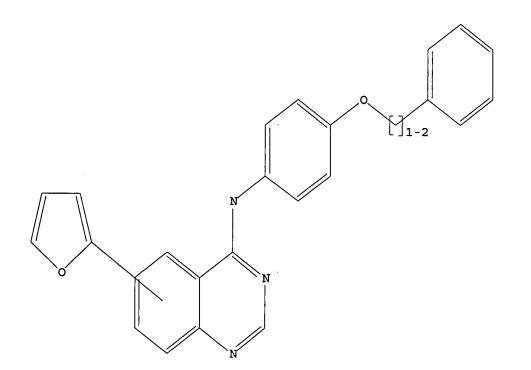
Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

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L1 STRUCTURE UPLOADED

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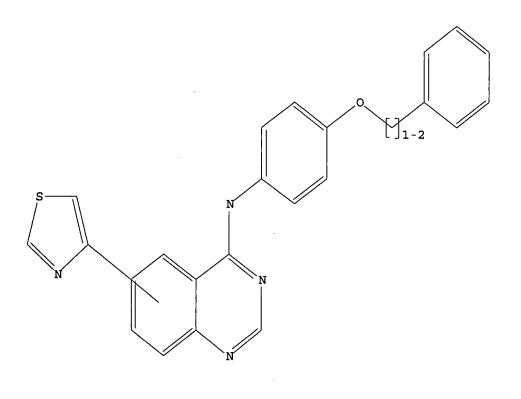


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100.0% PROCESSED 35 ITERATIONS SEARCH TIME: 00.00.01 19 ANSWERS

110 ANSWERS

L4 19 SEA SSS FUL L2

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FULL ESTIMATED COST

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10/ 071,358 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited. FILE COVERS 1907 - 29 Apr 2003 VOL 138 ISS 18 FILE LAST UPDATED: 28 Apr 2003 (20030428/ED) This file contains CAS Registry Numbers for easy and accurate substance identification. => s 13 L5 9 L3 => s 14 L6 5 L4 => s 15 not 16 L7 4 L5 NOT L6 => d l6 1- ibib abs hitstr YOU HAVE REQUESTED DATA FROM 5 ANSWERS - CONTINUE? Y/(N):y ANSWER 1 OF 5 CAPLUS COPYRIGHT 2003 ACS L6 ACCESSION NUMBER: 2002:555376 CAPLUS DOCUMENT NUMBER: 137:119644 TITLE: 4-Quinazolineamine derivative combination with other antineoplastic agent for cancer treatment, and compound preparation. INVENTOR (S) : Lackey, Karen Elizabeth; Spector, Neil; Wood, Edgar Raymond, III; Xia, Wenle PATENT ASSIGNEE(S): Glaxo Group Limited, UK SOURCE : PCT Int. Appl., 57 pp. CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE : English FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE ----- ---------WO 2002056912 A2 20020725 WO 2002-US1130 20020114 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG PRIORITY APPLN. INFO.: US 2001-262402P P 20010116 OTHER SOURCE(S): MARPAT 137:119644 A method of treating cancer is described which includes administration of AB a 4-quinazolineamine (prepn. included) and at least one other antineoplastic agent. Also described is a pharmaceutical combination including the 4-quinazolineamines. IT 443883-07-6P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

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10/ 071,358
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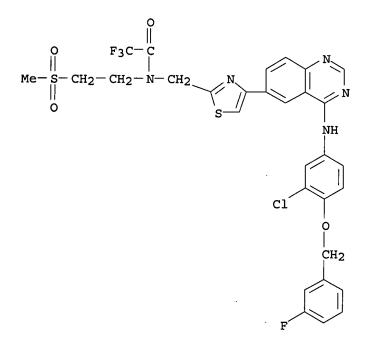
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(Reactant or reagent)
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(prepn. and reaction; quinazolineamine deriv. combination with other antineoplastic agent for cancer treatment, and compd. prepn.)

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RN 443883-07-6 CAPLUS
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CN Acetamide, N-[[4-[4-[[3-chloro-4-[(3-fluorophenyl)methoxy]phenyl]amino]-6quinazolinyl]-2-thiazolyl]methyl]-2,2,2-trifluoro-N-[2-(methylsulfonyl)ethyl]- (9CI) (CA INDEX NAME)



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IT 388082-82-4P 443883-12-3P
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RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

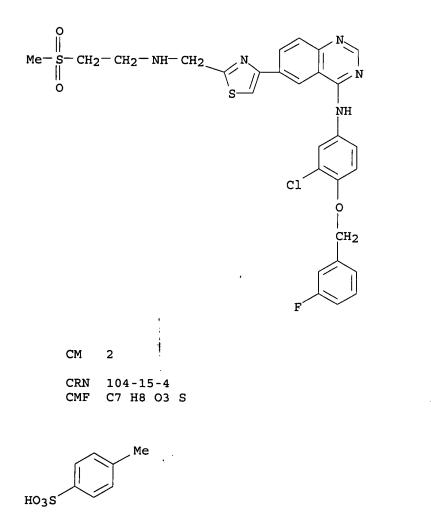
(quinazolineamine deriv. combination with other antineoplastic agent for cancer treatment, and compd. prepn.)

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RN 388082-82-4 CAPLUS
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CN 4-Quinazolinamine, N-[3-chloro-4-[(3-fluorophenyl)methoxy]phenyl]-6-[2-
[[2-(methylsulfonyl)ethyl]amino]methyl]-4-thiazolyl]-,
bis(4-methylbenzenesulfonate) (9CI) (CA INDEX NAME)
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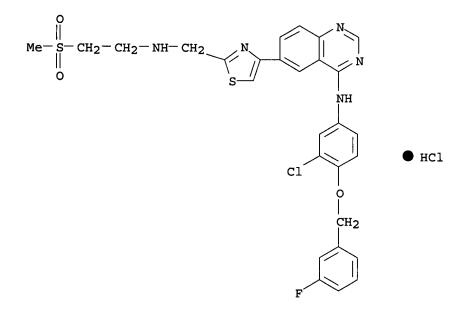
CRN 388082-81-3 CMF C28 H25 Cl F N5 O3 S2 î



RN 443883-12-3 CAPLUS

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CN 4-Quinazolinamine, N-[3-chloro-4-[(3-fluorophenyl)methoxy]phenyl]-6-[2-
[[[2-(methylsulfonyl)ethyl]amino]methyl]-4-thiazolyl]-, monohydrochloride
(9CI) (CA INDEX NAME)
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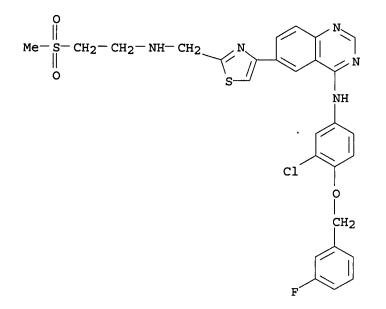
IT 388082-81-3

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(quinazolineamine deriv. combination with other antineoplastic agent for cancer treatment, and compd. prepn.)

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RN 388082-81-3 CAPLUS
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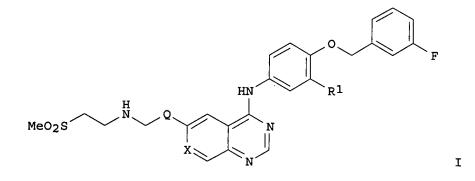
CN 4-Quinazolinamine, N-[3-chloro-4-[(3-fluorophenyl)methoxy]phenyl]-6-[2-[[[2-(methylsulfonyl)ethyl]amino]methyl]-4-thiazolyl]- (9CI) (CA INDEX NAME)



L6 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 2002:31441 CAPLUS DOCUMENT NUMBER: 136:102396 TITLE: Preparation of quinazoline ditosylate salts as inhibitors of erbB protein tyrosine kinases. INVENTOR(S): McClure, Michael Scott; Osterhout, Martin Howard;

Roschangar, Frank; Sacchetti, Mark Joseph PATENT ASSIGNEE(S): Glaxo Group Limited, UK SOURCE : PCT Int. Appl., 68 pp. CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE ------ - - -------------------WO 2002002552 A1 20020110 WO 2001-US20706 20010628 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG EP 2001-952304 EP 1294715 20010628 A1 20030326 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, R: IE, SI, LT, LV, FI, RO, MK, CY, AL, TR NO 2002006196 20030224 NO 2002-6196 Α 20021223 PRIORITY APPLN. INFO.: US 2000-215508P Ρ 20000630 US 2001-271845P Ρ 20010227 WO 2001-US20706 W 20010628 OTHER SOURCE(S): MARPAT 136:102396

GI



AB Title compds. (I; R1 = Cl, Br; X = CH, N, CF; Q = thiazolylene, furylene), were prepd. Thus, 5-[4-[3-chloro-4-(3-fluorobenzyloxy)anilino]-6quinazolinyl]furan-2-carboxaldehyde 4-methylbenzenesulfonate (prepn. given), diisopropylethylamine, and 2-(methylsulfone)ethylamine were stirred 1 h in THF/IPA; he preformed imine/THF soln. was transferred to a stirred suspension of NaBH(OAc)3 in THF. After 90 min, aq. NaOH was added followed by sepn. of the aq. layer treatment of the org. layer with 4-MeC6H4SO3H to give 88% N-[3-chloro-4-[(3-fluorobenzyl)oxy]phenyl]-6-[5-[[2-(methanesulfonyl)ethyl]amino]methyl]-2-furyl-4-quinazolinamine ditosylate. This inhibited EGFr and ErbB2 at <0.10 .mu.M.</p>

IT 388082-82-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of quinazoline ditosylate salts as inhibitors of erbB protein tyrosine kinases)

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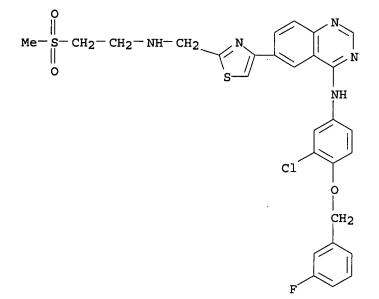
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RN 388082-82-4 CAPLUS
CN 4-Quinazolinamine, N-[3-chloro-4-[(3-fluorophenyl)methoxy]phenyl]-6-[2-
[[[2-(methylsulfonyl)ethyl]amino]methyl]-4-thiazolyl]-,
bis(4-methylbenzenesulfonate) (9CI) (CA INDEX NAME)
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CM 1

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CRN 388082-81-3
CMF C28 H25 Cl F N5 O3 S2
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CM 2

CRN 104-15-4 CMF C7 H8 O3 S

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REFERENCE	COU	NT :

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

APLUS COPYRIGHT 2003 ACS
2001:50639 CAPLUS
134:100886
Preparation of anilinoquinazolines as protein tyrosine kinase inhibitors
Cockerill, George Stuart; Lackey, Karen Elizabeth
Glaxo Group Limited, UK
PCT Int. Appl., 152 pp.
CODEN: PIXXD2
Patent
English
T: 1

GI

PATENT NO. KIND DATE APPLICATION NO. DATE ---- ----WO 2000-US18128 20000630 20010118 WO 2001004111 A1 W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG A1 20020403 EP 2000-943348 20000630 EP 1192151 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, R: IE, SI, LT, LV, FI, RO T2 20030204 JP 2003504363 JP 2001-509721 20000630 PRIORITY APPLN. INFO.: GB 1999-16213 A 19990709 GB 1999-16218 19990709 А WO 2000-US18128 W 20000630 OTHER SOURCE(S): MARPAT 134:100886

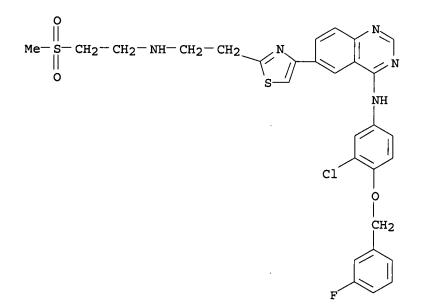
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. [I; X = CR1 and Y = N; or X = N and Y = CR1; X = CR1 and Y = CR2; X = CR2 and Y = CR1; R1 = Ar(CH2)pZCH2CH2SO2R5 (wherein Ar = (un)substituted Ph, furan, thiophene, etc.; Z = O, S, NH, NR6; p = 1-4; R5 = alkyl substituted by 5-10 membered heterocyclic group, 3-10 membered carbocyclic group, etc.; R6 = alkyl, alkoxyalkyl, hydroxyalkyl, etc.); R2 = H, halo, OH, etc.; R3 = pyridylmethoxy, benzyloxy, halo-, dihalo- and trihalobenzyloxy; R4 = H, halo, alkyl, etc.; with the proviso that when p = 1 and Z = NH, R5 cannot represent Me] which exhibit protein tyrosine kinase inhibition, in particular erbB family kinase inhibition, and useful in treating cancer and psoriasis, were prepd. E.g., a multi-step synthesis of the anilinoquinazoline II was given. Biol. data (erbB-2, erbB-4, EGFr, and cell proliferation inhibition) for the compds. I were presented.

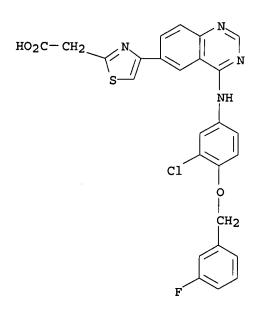
IT 319917-42-5P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of anilinoquinazolines as protein tyrosine kinase inhibitors) RN 319917-42-5 CAPLUS

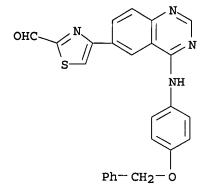
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- RN 320337-50-6 CAPLUS
 CN 2-Thiazoleacetic acid, 4-[4-[[3-chloro-4-[(3-fluorophenyl)methoxy]phenyl]a
 mino]-6-quinazolinyl]- (9CI) (CA INDEX NAME)

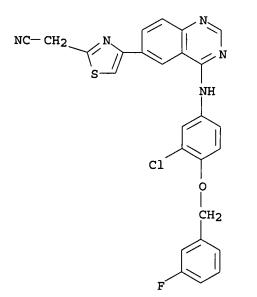


- RN 307327-30-6 CAPLUS
- CN 2-Thiazolecarboxaldehyde, 4-[4-[[4-(phenylmethoxy)phenyl]amino]-6quinazolinyl]- (9CI) (CA INDEX NAME)



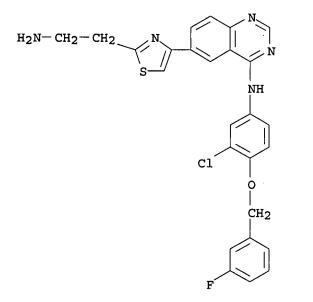
RN 320337-33-5 CAPLUS

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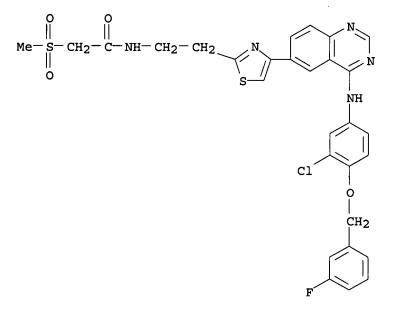


- RN 320337-34-6 CAPLUS
- CN 4-Quinazolinamine, 6-[2-(2-aminoethyl)-4-thiazolyl]-N-[3-chloro-4-[(3-fluorophenyl)methoxy]phenyl]- (9CI) (CA INDEX NAME)

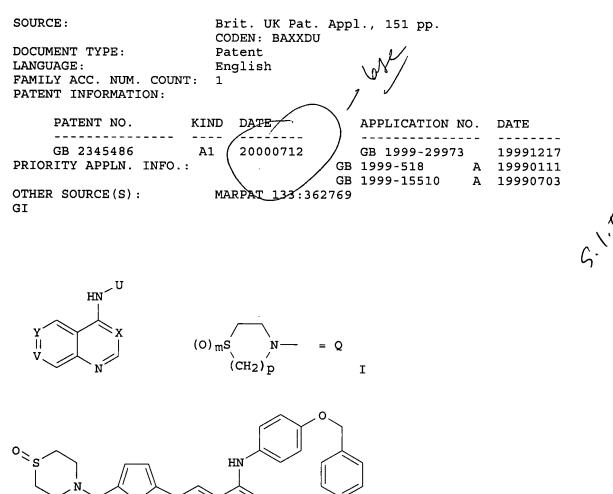
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- RN
- 320337-35-7 CAPLUS Acetamide, N-[2-[4-[4-[[3-chloro-4-[(3-fluorophenyl)methoxy]phenyl]amino]-6-quinazolinyl]-2-thiazolyl]ethyl]-2-(methylsulfonyl)- (9CI) (CA INDEX CN NAME)

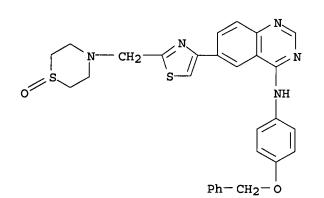


REFERENCE COUNT:	14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS
	RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L6 ANSWER 4 OF 5	CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER:	2000:854415 CAPLUS
DOCUMENT NUMBER:	133:362769
TITLE:	Preparation of 6-(thiomorpholinomethylfuranyl)-4-
	quinazolinamines as protein tyrosine kinase inhibitors
INVENTOR (S) :	Carter, Malcolm Clive; Cockerill, George Stuart,
	Guntrip/ Stephen Barry;/ Lackey, Karen Elizabeth;
	Smith, Kathryn Jane
PATENT ASSIGNEE(S):	Glaxo Group Ltd., UK



- II
- AB The title compds. (I) [wherein X = N or CH; V and Y = independently CR1, CR2, or N; and V .noteq. Y; R1 = Q(CH2)qAr; m = 1 or 2; p = 1 or 2; q = 1-4; Ar = (un) substituted Ph, furanyl, thiophenyl, pyrrolyl, or thiazolyl; R2 = H, halo, OH, alkyl(amino) alkoxy, or dialkylamino; U =(un) substituted Ph, pyridyl, (benz) imidazolyl, (iso) indolyl, (iso)indolinyl, indazolyl, or benzotriazolyl] were prepd. as protein tyrosine kinase inhibitors for the treatment of cancer and other disorders mediated by aberrant protein tyrosine kinase activity. For example, II.bul.2HCl was formed in a multi-step sequence involving (1) reaction of 5-(1,3-dioxolan-2-yl)-2-(tributylstannyl)furan with (4-benzyloxyphenyl)(6bromoquinazolin-4-yl)amine using Pd(PPh3)2Cl2 in dioxane, (2) conversion of the cyclic acetal to the aldehyde with HCl in THF, (3) addn. of thiomorpholine-S-oxide in CH2Cl2 and conversion to the HCl salt. I inhibited EGFR and c-erbB-2 tyrosine kinase with IC50 < 0.10 .mu.M and suppressed cell proliferation against a range of tumor cell lines. IT 307328-15-0P, (4-Benzyloxyphenyl)-[6-[2-((1-oxothiomorpholin-4yl)methyl)thiazol-4-yl]quinazolin-4-yl]amine dihydrochloride RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of thiomorpholinomethylfuranyl quinazolinamine and pyrido[3,4-d]pyrimidinamine anticancer agents by amination of (haloheterocyclyl)furancarboxaldehydes with anilines followed by addn. of thiomorpholine (oxides))

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RN 307328-15-0 CAPLUS
CN 4-Quinazolinamine, 6-[2-[(1-oxido-4-thiomorpholinyl)methyl]-4-thiazolyl]-N-
[4-(phenylmethoxy)phenyl]-, dihydrochloride (9CI) (CA INDEX NAME)
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•2 HCl

IT 307327-30-6P, 4-[4-[(4-Benzyloxyphenyl)amino]quinazolin-6yl]thiazole-2-carbaldehyde RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (prepn. of thiomorpholinomethylfuranyl quinazolinamine and pyrido[3,4-d]pyrimidinamine anticancer agents by amination of (haloheterocyclyl)furancarboxaldehydes with anilines followed by addn. of thiomorpholine (oxides))

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RN 307327-30-6 CAPLUS
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CN 2-Thiazolecarboxaldehyde, 4-[4-[[4-(phenylmethoxy)phenyl]amino]-6-
quinazolinyl]- (9CI) (CA INDEX NAME)
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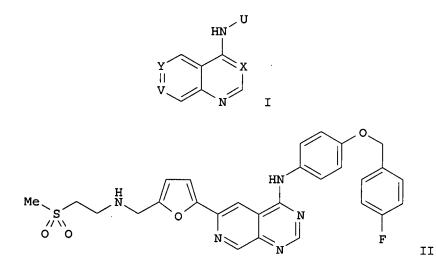
L6 ANSWER 5 OF 5	CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER:	1999:451297 CAPLUS
DOCUMENT NUMBER:	131:102288
TITLE:	Bicyclic heteroaromatic compounds [quinazolinamines,
	pyridopyrimidines, and analogs] useful as protein tyrosine kinase inhibitors
INVENTOR (S) :	Carter, Malcolm Clive; Cockerill, George Stuart;
	Guntrip, Stephen Barry; Lackey, Karen Elizabeth;
	Smith, Kathryn Jane
PATENT ASSIGNEE(S):	Glaxo Group Limited, UK

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SOURCE: PCT Int. Appl., 129 pp. CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PA:	CENT	NO.	KIND DATE						A -		. 1	', '							
WO	9935	146		A	1	1999	0715		W	0 19	99-E	P48		1999	0108			۲.	
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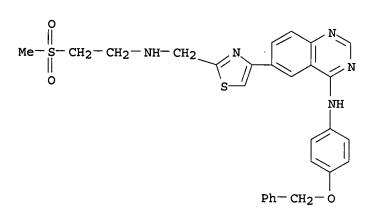
AB Title compds. I and their salts and solvates are disclosed [wherein X = N

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or CH; Y = CR1 and V = N; or Y = N and V = CR1; or Y = CR1 and V = CR2; or Y = CR2 and V = CR1; R1 = MeSO2CH2CH2NHCH2-Ar-, wherein Ar = (un) substituted Ph, furan, thiophene, pyrrole, or thiazole; R2 = H, halo, OH, C1-4 alkyl, C1-4 alkoxy, C1-4 alkylamino, or di [C1-4 alkyl]amino; U = Ph, pyridyl, 3H-imidazolyl, indolyl, isoindolyl, indolinyl, isoindolinyl, 1H-indazolyl, 2,3-dihydro-1H-indazolyl, 1H-benzimidazolyl, 2,3-dihydro-1H-benzimidazolyl or 1H-benzotriazolyl group, substituted by R3 and optionally by R4; R3 = (halo)benzyl, benzoyl, pyridylmethyl, pyridylmethoxy, phenoxy, benzyloxy, halo-, dihalo- and (halo)benzyloxy, PhSO2, (trihalomethyl)benzyl, (trihalomethyl)benzyloxy, (R5)n-substituted phthalimido; R4 = OH, halo, C1-4 alkyl, C2-4 alkenyl, C2-4 alkynyl, C1-4 alkoxy, (di)(alkyl)amino, C1-4 alkylthio, etc.; R5 = halo, C1-4 alkyl, C1-4 alkoxy; n = 0-3]. Also disclosed are methods for their prepn., pharmaceutical compns. contg. them, and their use in medicine. The compds. are inhibitors of protein tyrosine kinases, and as such are useful in the treatment of cancer, psoriasis, and rheumatoid arthritis. Over 40 title compds. and numerous intermediates were prepd. For example, 4,6-dichloropyrido[3,4-d]pyrimidine was condensed with 4-[(4-fluorobenzyl)oxy]aniline at the 4-chloro position, followed by Pd-catalyzed coupling with 5-(1,3-dioxolan-2-yl)-2-(tributylstannyl)furan at the 6-chloro position, hydrolysis of the dioxolane protecting group to give an aldehyde, reductive amination of the latter with MeSCH2CH2NH2, and finally S-oxidn. with Oxone .RTM. and acidification, to give title salt In a methylene blue growth inhibition assay against 5 tumor cell II.2HCl. lines, II.2HCl had an IC50 of < 5 .mu.M against 4 of them, and an IC50 of 25-50 .mu.M against the 5th. 231277-70-6P 231277-75-1P 231277-76-2P 231277-77-3P 231277-78-4P 231277-87-5P 231277-88-6P 231278-07-2P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (target compd.; prepn. of quinazolinamines and analogs as protein tyrosine kinase inhibitors) 231277-70-6 CAPLUS 4-Quinazolinamine, 6-[2-[[[2-(methylsulfonyl)ethyl]amino]methyl]-4thiazolyl]-N-[4-(phenylmethoxy)phenyl]-, dihydrochloride (9CI) (CA INDEX NAME)

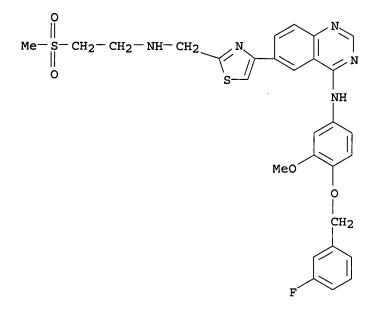


●2 HCl

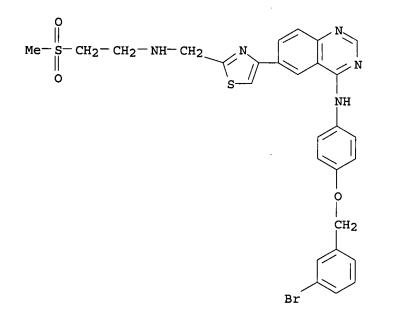
- RN 231277-75-1 CAPLUS
- CN 4-Quinazolinamine, N-[4-[(3-fluorophenyl)methoxy]-3-methoxyphenyl]-6-[2-[[[2-(methylsulfonyl)ethyl]amino]methyl]-4-thiazolyl]- (9CI) (CA INDEX

.

NAME)

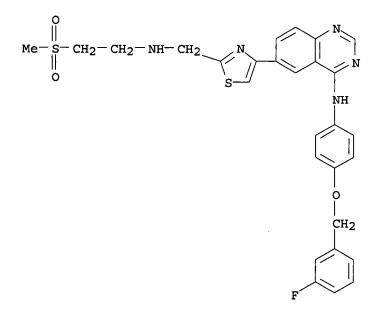


RN 231277-76-2 CAPLUS
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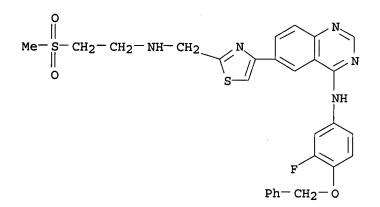


RN 231277-77-3 CAPLUS

CN 4-Quinazolinamine, N-[4-[(3-fluorophenyl)methoxy]phenyl]-6-[2-[[[2-(methylsulfonyl)ethyl]amino]methyl]-4-thiazolyl]- (9CI) (CA INDEX NAME) ,

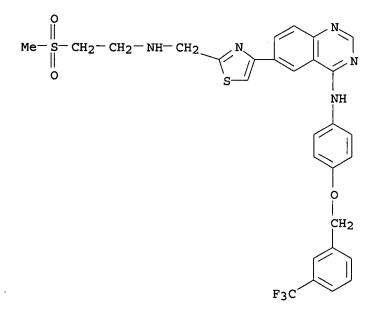


RN 231277-78-4 CAPLUS CN 4-Quinazolinamine, N-[3-fluoro-4-(phenylmethoxy)phenyl]-6-[2-[[[2-(methylsulfonyl)ethyl]amino]methyl]-4-thiazolyl]- (9CI) (CA INDEX NAME)

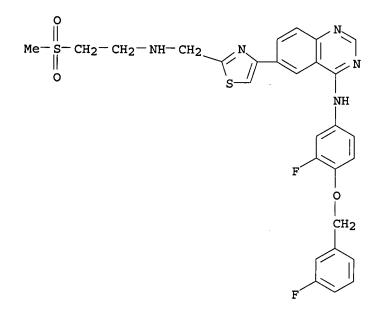


RN 231277-87-5 CAPLUS

CN 4-Quinazolinamine, 6-[2-[[[2-(methylsulfonyl)ethyl]amino]methyl]-4thiazolyl]-N-[4-[[3-(trifluoromethyl)phenyl]methoxy]phenyl]- (9CI) (CA INDEX NAME)

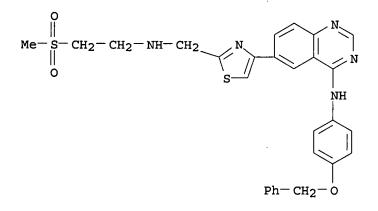


- RN 231277-88-6 CAPLUS
- CN 4-Quinazolinamine, N-[3-fluoro-4-[(3-fluorophenyl)methoxy]phenyl]-6-[2-[[[2-(methylsulfonyl)ethyl]amino]methyl]-4-thiazolyl]- (9CI) (CA INDEX NAME)



RN 231278-07-2 CAPLUS

CN 4-Quinazolinamine, 6-[2-[[[2-(methylsulfonyl)ethyl]amino]methyl]-4thiazolyl]-N-[4-(phenylmethoxy)phenyl]- (9CI) (CA INDEX NAME) .



REFERENCE COUNT:2THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ACCESSION NUMBER: 2 TITLE: 2 H	S COPYRIGHT 2003 ACS 2002:668812 CAPLUS Anti-tumor activity of GW572016: a dual tyrosine kinase inhibitor blocks EGF activation of EGFR/erbB2						
AUTHOR (S):	and downstream Erk1/2 and AKT pathways Xia, Wenle; Mullin, Robert J.; Keith, Barry R.; Liu, Lei-Hua; Ma, Hong; Rusnak, David W.; Owens, Gary; Alligood, Krystal J.; Spector, Neil L.						
CORPORATE SOURCE: G	GlaxoSmithKline, Department of Discovery Medicine, Research Triangle Park, North Carolina, NC, 27709-3398, USA						
SOURCE: C	Oncogene (2002), 21(41), 6255-6263						
	Nature Publishing Group						
	Journal						
LANGUAGE : E	English						
AB Dual EGFR/erbB2 inhib	bition is an attractive therapeutic strategy for						
epithelial tumors, as triggers potent proli small mol., GW572016, kinases leading to gr erbB2-dependent tumor phosphorylation of EG AKT, downstream effec	s ligand-induced erbB2/EGFR heterodimerization iferative and survival signals. Here we show that a , potently inhibits both EGFR and erbB2 tyrosine rowth arrest and/or apoptosis in EGFR and r cell lines. GW572016 markedly reduced tyrosine GFR and erbB2, and inhibited activation of Erk1/2 and ctors of proliferation and cell survival, resp. of activated AKT in erbB2 overexpressing cells						

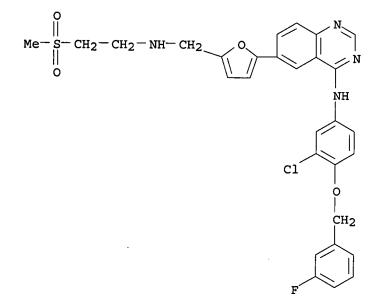
correlated with a 23-fold increase in apoptosis compared with vehicle controls. EGF, often elevated in cancer patients, did not reverse the inhibitory effects of GW572016. These observations were reproduced in vivo, where GW572016 treatment inhibited activation of EGFR, erbB2, Erk1/2 and AKT in human tumor xenografts. Erk1/2 and AKT represent potential biomarkers to assess the clin. activity of GW572016. Inhibition of activated AKT in EGFR or erbB2-dependent tumors by GW572016 may lead to tumor regressions when used as a monotherapy, or may enhance the anti-tumor activity of chemotherapeutics, since constitutive activation of AKT has been linked to chemo-resistance.

IT 231277-92-2

RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU
(Therapeutic use); BIOL (Biological study); USES (Uses)
 (GW572016 antitumor activity: dual tyrosine kinase inhibitor blocks EGF

activation of EGFR/erbB2 and downstream Erk1/2 and AKT pathways) RN 231277-92-2 CAPLUS

CN 4-Quinazolinamine, N-[3-chloro-4-[(3-fluorophenyl)methoxy]phenyl]-6-[5-[[[2-(methylsulfonyl)ethyl]amino]methyl]-2-furanyl]- (9CI) (CA INDEX NAME)



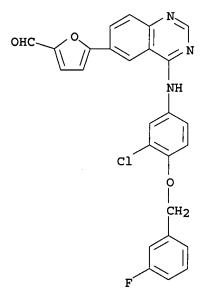
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	CAPLUS COPYRIGHT 2003 ACS	
ACCESSION NUMBER:	2002:117136 CAPLUS	
DOCUMENT NUMBER:	137:125053	
TITLE:	Use of lithium N,O-dimethylhydroxylamide as an	۸
	efficient in situ protecting agent for aromatic	ر ک
	aldehydes	M
AUTHOR (S) :		3
	E.; Sharp, Matthew J.; Matsuoka, Richard T.	50
CORPORATE SOURCE:	GlaxoSmithKline, Chemical DevelopmentSynthetic	
	Chemistry, Research Triangle Park, NC, 27709, USA	
SOURCE:	Tetrahedron (2002), 58(9), 1657-1666	
	CODEN: TETRAB; ISSN: 0040-4020	
PUBLISHER:	Elsevier Science Ltd.	
DOCUMENT TYPE:	Journal	
LANGUAGE :	English	
OTHER SOURCE(S):	CASREACT 137:125053	
AB Lithium N,O-di	methylhydroxylamide was effectively used as an alternative	

in situ protecting agent with low ortho-directing properties for aryl and heteroaryl aldehydes RCHO (R = Ph, 2,5-F(Br)C6H3, 2-furyl). The procedure was successfully applied to two practical multi-step one-pot syntheses of developmental drug candidate intermediates. Aldehyde protecting and ortho-directing properties of other lithium dialkylamides, such as diethylamide, morpholide, etc., were also evaluated.

IT 231278-84-5P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of substituted (quinazolinyl)furaldehyde by Suzuki coupling of iodoquinazoline deriv. with (formyl)furylboronic acid, prepd. from lithium alkylamide protected furaldehyde)

- RN 231278-84-5 CAPLUS
- CN 2-Furancarboxaldehyde, 5-[4-[[3-chloro-4-[(3-fluorophenyl)methoxy]phenyl]a mino]-6-quinazolinyl]- (9CI) (CA INDEX NAME)

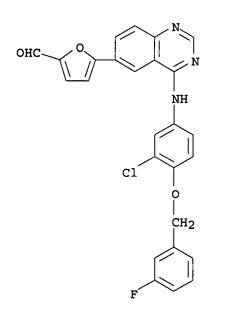


REFERENCE COUNT:	38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L7 ANSWER 3 OF 4 CAPL ACCESSION NUMBER: DOCUMENT NUMBER: TITLE: AUTHOR(S):	JUS COPYRIGHT 2003 ACS 2001:669418 CAPLUS 136:19979 A practical one-pot synthesis of 5-aryl-2-furaldehydes McClure, Michael S.; Roschangar, Frank; Hodson, Stephen J.; Millar, Alan; Osterhout, Martin H.
CORPORATE SOURCE:	Chemical Development - Synthetic Chemistry, GlaxoSmithKline, Research Triangle Park, NC, 27709, USA
SOURCE :	Synthesis (2001), (11), 1681-1685 CODEN: SYNTBF; ISSN: 0039-7881
coupling of aryl ha furylboronic acid i delivers high yield IT 231278-84-5P RL: SPN (Synthetic	Georg Thieme Verlag Journal English CASREACT 136:19979 hesis of 5-aryl-2-furaldehydes via Pd-mediated Suzuki lides with in situ generated 5-(diethoxymethyl)-2- s described. The procedure has general applicability, s, and is amenable to scale-up. preparation); PREP (Preparation) uraldehydes by Suzuki coupling of aryl halides with
(Froph. of all it	analogical of subari coupling of aryl hardes with

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furylboronic acids)
RN 231278-84-5 CAPLUS
CN 2-Furancarboxaldehyde, 5-[4-[[3-chloro-4-[(3-fluorophenyl)methoxy]phenyl]a
mino]-6-quinazolinyl]- (9CI) (CA INDEX NAME)
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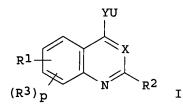
REFERENCE COUNT:

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L7 ANSWER 4 OF 4 CAP	LUS COPYRIGHT 2003 ACS										
ACCESSION NUMBER:											
DOCUMENT NUMBER:	128:140716										
TITLE:	Preparation of azolylquinazolines and related										
	compounds as protein tyroșine kinase inhibitors./										
INVENTOR (S) :	Cockerill, George Stuart; Carter, Malcolm Clive;										
	Guntrip, Stephen Barry; Smith, Kathryn Jane										
PATENT ASSIGNEE(S):											
. ,	Carter, Malcolm Clive; Guntrip, Stephen Barry; Smith,										
	Kathryn Jane										
SOURCE :	PCT Int. Appl., 119 pp.										
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WO 9802434	 A1 19980122 WO 1997-EP3672 19970711										
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WO 9802434 W: AL, AM, AT DK, EE, ES LC, LK, LR PT, RO, RU UZ, VN, YU RW: GH, KE, LS GB, GR, IE GN, ML, MR ZA 9706147 AU 9737668	A1 19980122 WO 1997-EP3672 19970711 , AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, , FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, , LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, , SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, , ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM , MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, , IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, , NE, SN, TD, TG A 19990111 ZA 1997-6147 19970710 A1 19980209 AU 1997-37668 19970711										
WO 9802434 W: AL, AM, AT DK, EE, ES LC, LK, LR PT, RO, RU UZ, VN, YU RW: GH, KE, LS GB, GR, IE GN, ML, MR ZA 9706147 AU 9737668	A1 19980122 WO 1997-EP3672 19970711 , AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, , FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, , LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, , SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, , ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM , MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, , IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, , NE, SN, TD, TG A 19990111 ZA 1997-6147 19970710 A1 19980209 AU 1997-37668 19970711										

THERE ARE 63 CITED REFERENCES AVAILABLE FOR THIS

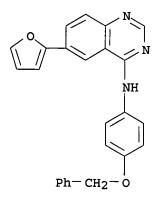
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	IE,														•	•
JP 200	05148	06	T	2	2000	1107		J	P 1	998-	50559	6	1997	0711		
AT 227	283		Ē		2002	1115		А	T 1	997-	93445	8	1997	0711		
US 639	1874		B	1 :	2002	0521		U	IS 1	998-	21426	7	1998	1231		
US 200	21472	14	A	1 :	2002	1010		U	S 2	002-	62647		2002	0131		
PRIORITY AF	PLN.	INFO	.:				G	B 1	996	-147	55	Α	1996	0713		
							G	B 1	996	-254	58	Α	1996	1207		
							W	10 1	997	-EP3	672	W	1997	0711		
							Ŭ	JS 1	998	-214	267	A1	1998	1231		
OTHER SOURC	E(S):			MAR	PAT	128:3	14071	.6								

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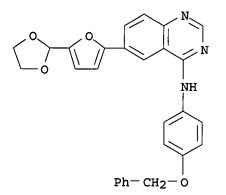


Title compds. [I; U = substituted Ph, mono- or bicyclic 5-10 membered AB (hetero)cyclyl; X = N, CH; Y = W(CH2), (CH2)W, W; W = O, S(O)m, NRa; Ra = H, alkyl; m = 0-2; R1 = (substituted) Ph, 5- or 6-membered heterocyclyl contg. 1-4 heteroatoms selected from N, O, S(O)m; with the provision that the ring does not contain two adjacent 0 or S(0)m atoms and that where the ring contains only N as heteroatom(s) the ring is C-linked to the quinazoline or quinoline ring; R3 = H, amino, halo, OH, NO2, CO2H, CHO, cyano, CF3, OCF3, carbamoyl, alkoxycarbonyl, Ph, PhO, pyridonyl, pyrrolidinyl, imidazolyl, dioxolanyl, arylsulfonyl, alkylsulfonyl, alkylcarbamoylalkyl, piperidinoalkoxy, thiomorpholino, etc.; 2 adjacent R3 = methylenedioxy, ethylenedioxy; p = 0-3], were prepd. Thus, (S) -1-[5-[4-(1-benzyl-1H-indazol-5-ylamino)quinazolin-6-yl]furan-2ylmethyl]pyrrolidine-2-carboxylic acid amide dihydrochloride (prepn. given) inhibited BT474 human breast cancer cell proliferation with IC50 = 2 nM. IT 202196-33-6P 202196-42-7P 202196-46-1P 202196-47-2P 202196-48-3P 202196-49-4P 202196-50-7P 202196-51-8P 202196-52-9P 202196-85-8P 202196-86-9P 202196-87-0P 202196-88-1P 202196-89-2P 202196-90-5P 202196-91-6P 202197-80-6P 202197-81-7P 202197-82-8P 202198-08-1P 202198-09-2P 202198-10-5P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of azolylquinazolines and related compds. as protein tyrosine kinase inhibitors) RN 202196-33-6 CAPLUS 4-Quinazolinamine, 6-(2-furanyl)-N-[4-(phenylmethoxy)phenyl]- (9CI) CN (CA INDEX NAME)

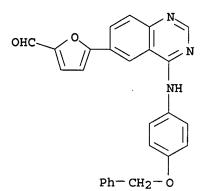
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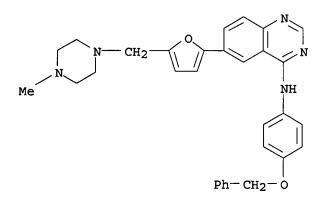
RN 202196-42-7 CAPLUS
CN 4-Quinazolinamine, 6-[5-(1,3-dioxolan-2-yl)-2-furanyl]-N-[4(phenylmethoxy)phenyl]- (9CI) (CA INDEX NAME)



RN 202196-46-1 CAPLUS
CN 2-Furancarboxaldehyde, 5-[4-[[4-(phenylmethoxy)phenyl]amino]-6quinazolinyl]- (9CI) (CA INDEX NAME)

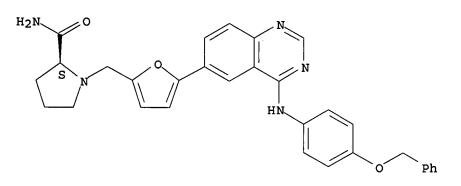


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RN 202196-47-2 CAPLUS
CN 4-Quinazolinamine, 6-[5-[(4-methyl-1-piperazinyl)methyl]-2-furanyl]-N-[4-
(phenylmethoxy)phenyl]- (9CI) (CA INDEX NAME)
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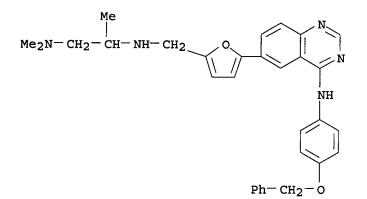


- RN 202196-48-3 CAPLUS
- CN 2-Pyrrolidinecarboxamide, 1-[[5-[4-[[4-(phenylmethoxy)phenyl]amino]-6quinazolinyl]-2-furanyl]methyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

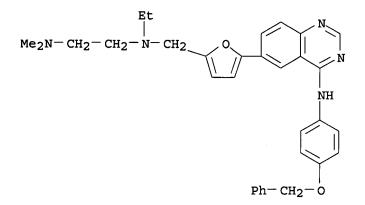


RN 202196-49-4 CAPLUS
CN 1,2-Propanediamine, N1,N1-dimethyl-N2-[[5-[4-[[4 (phenylmethoxy)phenyl]amino]-6-quinazolinyl]-2-furanyl]methyl]- (9CI) (CA
 INDEX NAME)

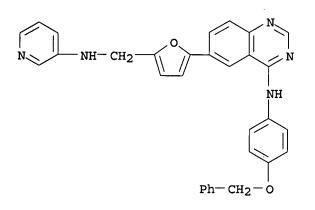


RN 202196-50-7 CAPLUS
CN 1,2-Ethanediamine, N-ethyl-N',N'-dimethyl-N-[[5-[4-[[4(phenylmethoxy)phenyl]amino]-6-quinazolinyl]-2-furanyl]methyl]- (9CI) (CA
INDEX NAME)

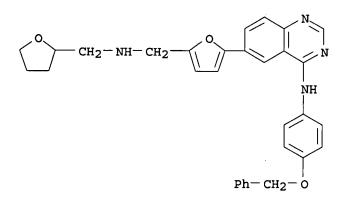
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RN 202196-51-8 CAPLUS
CN 4-Quinazolinamine, N-[4-(phenylmethoxy)phenyl]-6-[5-[(3pyridinylamino)methyl]-2-furanyl]- (9CI) (CA INDEX NAME)

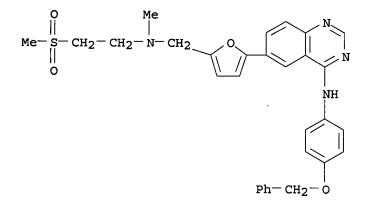


- RN 202196-52-9 CAPLUS
- CN 4-Quinazolinamine, N-[4-(phenylmethoxy)phenyl]-6-[5-[[[(tetrahydro-2furanyl)methyl]amino]methyl]-2-furanyl]- (9CI) (CA INDEX NAME)



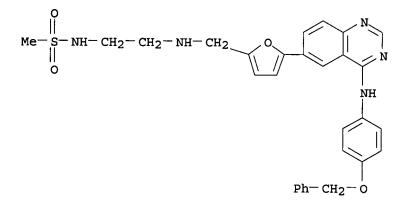
- RN 202196-85-8 CAPLUS
- CN 4-Quinazolinamine, 6-[5-[[methyl[2-(methylsulfonyl)ethyl]amino]methyl]-2furanyl]-N-[4-(phenylmethoxy)phenyl]- (9CI) (CA INDEX NAME)

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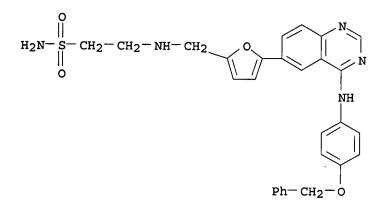


RN 202196-86-9 CAPLUS

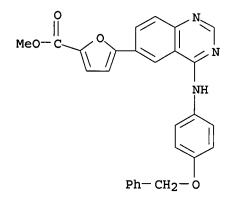
CN Methanesulfonamide, N-[2-[[[5-[4-[[4-(phenylmethoxy)phenyl]amino]-6quinazolinyl]-2-furanyl]methyl]amino]ethyl]- (9CI) (CA INDEX NAME)



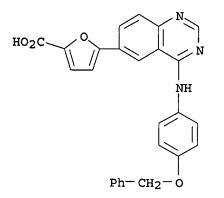
RN 202196-87-0 CAPLUS CN Ethanesulfonamide, 2-[[[5-[4-[[4-(phenylmethoxy)phenyl]amino]-6quinazolinyl]-2-furanyl]methyl]amino]- (9CI) (CA INDEX NAME) ١



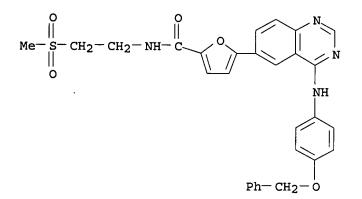
RN 202196-88-1 CAPLUS CN 2-Furancarboxylic acid, 5-[4-[[4-(phenylmethoxy)phenyl]amino]-6quinazolinyl]-, methyl ester (9CI) (CA INDEX NAME)



- RN 202196-89-2 CAPLUS
- CN 2-Furancarboxylic acid, 5-[4-[[4-(phenylmethoxy)phenyl]amino]-6quinazolinyl]- (9CI) (CA INDEX NAME)

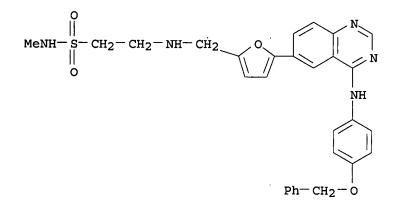


- RN 202196-90-5 CAPLUS
- CN 2-Furancarboxamide, N-[2-(methylsulfonyl)ethyl]-5-[4-[[4-(phenylmethoxy)phenyl]amino]-6-quinazolinyl]- (9CI) (CA INDEX NAME)

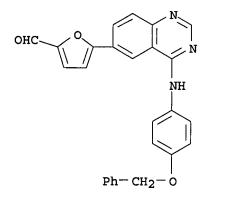


- RN 202196-91-6 CAPLUS
- CN Ethanesulfonamide, N-methyl-2-[[[5-[4-[[4-(phenylmethoxy)phenyl]amino]-6quinazolinyl]-2-furanyl]methyl]amino]- (9CI) (CA INDEX NAME)

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- RN 202197-80-6 CAPLUS
- CN 2-Furancarboxaldehyde, 5-[4-[[4-(phenylmethoxy)phenyl]amino]-6quinazolinyl]-, monohydrochloride (9CI) (CA INDEX NAME)

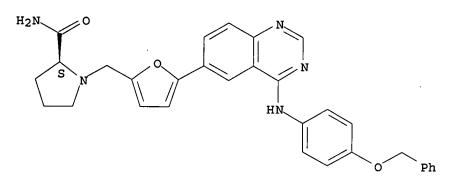


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RN 202197-81-7 CAPLUS

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CN 2-Pyrrolidinecarboxamide, 1-[[5-[4-[[4-(phenylmethoxy)phenyl]amino]-6-
quinazolinyl]-2-furanyl]methyl]-, monohydrochloride, (S)- (9CI) (CA INDEX
NAME)
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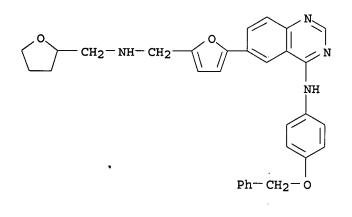
Absolute stereochemistry.



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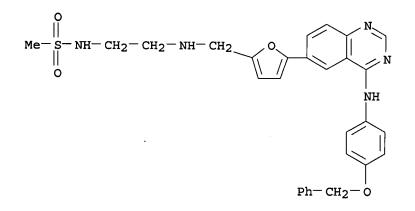
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RN 202197-82-8 CAPLUS
CN 4-Quinazolinamine, N-[4-(phenylmethoxy)phenyl]-6-[5-[[[(tetrahydro-2furanyl)methyl]amino]methyl]-2-furanyl]-, monohydrochloride (9CI) (CA
INDEX NAME)



HC1

- RN 202198-08-1 CAPLUS
- CN Methanesulfonamide, N-[2-[[[5-[4-[[4-(phenylmethoxy)phenyl]amino]-6quinazolinyl]-2-furanyl]methyl]amino]ethyl]-, dihydrochloride (9CI) (CA INDEX NAME)

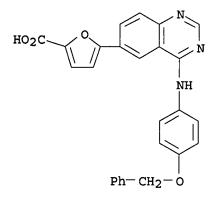




RN 202198-09-2 CAPLUS

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CN 2-Furancarboxylic acid, 5-[4-[[4-(phenylmethoxy)phenyl]amino]-6-
quinazolinyl]-, monohydrochloride (9CI) (CA INDEX NAME)
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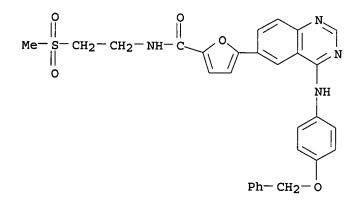
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HCl

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RN 202198-10-5 CAPLUS
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CN 2-Furancarboxamide, N-[2-(methylsulfonyl)ethyl]-5-[4-[[4-
(phenylmethoxy)phenyl]amino]-6-quinazolinyl]-, monohydrochloride (9CI)
(CA INDEX NAME)
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• HCl

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IT 202197-65-7P
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RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

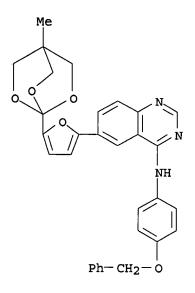
(prepn. of azolylquinazolines and related compds. as protein tyrosine kinase inhibitors)

RN 202197-65-7 CAPLUS

CN 4-Quinazolinamine, 6-[5-(4-methyl-2,6,7-trioxabicyclo[2.2.2]oct-1-yl)-2furanyl]-N-[4-(phenylmethoxy)phenyl]- (9CI) (CA INDEX NAME)

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REFERENCE COUNT:

THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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(FILE 'HOME' ENTERED AT 19:08:40 ON 29 APR 2003)

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L2		STR	UCTURE	UPLOAI	DED			
L3		110 S I	1 FUL					
L4		19 S I	2 FUL					

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 FILE 'CAPLUS' ENTERED AT 19:09:49 ON 29 APR 2003

 L5
 9 S L3

 L6
 5 S L4

 L7
 4 S L5 NOT L6

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